

**REMARKS**

Claims 18-19, 21-28, 31-35 and 41-45 are now pending.

Applicants traverse the rejection of claims 18-19, 21-28, 31-35 and 41-52 under 35 U.S.C. § 112, first paragraph (written description). The Office alleges that the application has no support for a granulate which lacks fibrous materials. Applicants respectfully submit that all of the examples in which a granulate is formed, namely Examples 5-9, contain no fibrous materials. Applicants respectfully submit that eliminating fibrous materials from the extruded granulate will enable such granulates to be made by extrusion as described on page 8, lines 19-20. Thus, as the application clearly suggests excluding fibrous materials, and none of the examples contain granulates having fibrous materials, it is respectfully submitted that granulates lacking fibrous materials are within the scope of the invention as conceived by the applicants at the time the application was filed. Even if, for the sake of argument, the applicants have included fibrous materials as part of the granulates, which they did not, such components may be excluded in the claims in accordance with MPEP § 2173.05(i).

Applicants traverse the rejections under 35 U.S.C. § 103(a) of a) claims 18-19, 21, 24-28, 31-35, 41-45 and 48-52, as obvious over Nielson in view of Ghani; b) claims 22-23 and 46-47 as obvious over Nielson in view of Ghani and further in view of Markussen; c) claims 18-19, 21-22, 24-28, 31-35, 41-46 and 58-52, as obvious over Nielson in view of Ghani and further in view of Haarasilta; and d) claims 23 and 47 as obvious over Nielson in view of Ghani and Haarasilta, in further in view of Markussen. Applicants agree with the Examiner's indication that Nielson and Haarasilta do not teach the extrusion of granulates lacking fibrous materials. The Office alleges that Ghani discloses enzyme granulates which lack fibrous materials and points to column 6, lines 43-48 thereof, which contains an example containing soy flour and corn syrup, that is, these components form a dry agglomerated soy flour. Applicants respectfully submit that soy flour contains four grams of fiber per quarter cup, as disclosed in the nutritional facts attached herewith as Exhibit A. It is not enough that Ghani discloses a non-fibrous component. Thus, Ghani does not disclose granulates lacking fibrous materials as claimed. Markussen does not overcome the deficiency of Nielson, Ghani, or Haarasilta.

The Office alleges that a skilled artisan would be motivated to make granulates without fibrous materials to avoid mechanical malfunctions in the extruder and to produce smaller granules. Applicants respectfully submit that none of the references teach that it is desirable to achieve either result or otherwise teach that fibrous materials may be excluded from the granulate. Applicants respectfully submit that the motivation alleged by the Office to form granulates lacking fibrous materials appears to be derived improperly from the present application, which describes that fibrous materials can prevent granulation by extrusion. None of the cited references disclose or suggest that granulates should exclude fibrous materials.

Further, Applicants respectfully submit that removing fibrous materials would render the prior art unsatisfactory for its intended purpose and, thus, there would be no motivation to make the proposed modification in accordance with MPEP § 2143.01, V. The object of Nielson's invention relates to treating a (fibrous) vegetable source to improve the solubility of proteins therein. If Nielson is modified to remove the fibrous vegetable source, then Nielson's invention would be unsatisfactory for its intended purpose. Thus, there is no motivation to remove fibrous materials to arrive at the claimed invention. As the Office's conclusion is a departure from established patent practice, applicants respectfully request clarification as to why it is acceptable to render Nielson's composition unsatisfactory for its intended purpose.

In addition, applicants respectfully submit that the Office's allegation on page 7 of the action that the prior art or applicants must provide evidence that shows "that no granulate can be formed by extrusion without fibrous materials" is misplaced. Rather, applicants respectfully submit that the Office must show that the cited references teach or suggest forming granulates by extrusion without fibrous materials. Moreover, applicants respectfully submit that advantageous results have been shown with respect to stability of granulates having the high concentration of activity as claimed. None of the other references have described how to make such a granulate as described in detail in the response mailed December 3, 2004.

For these reasons, applicants respectfully submit that *prima facie* obviousness has not been established, and even if the references did disclose the claimed invention, applicants have shown unexpected results with respect to the stability of the granulate comprising the high phytase concentrations as claimed.

CONCLUSION

The present application describes and exemplifies granulates lacking fibrous materials. None of the references disclose or suggest such granulates lacking fibrous materials. Further, there is no motivation to make such granulates as the granulates of the primary cited references would be rendered unsatisfactory for their intended purpose. Further, there is no expectation that granulates lacking fibrous materials would have the disclosed advantageous results. Thus, the written description and obviousness rejections may be properly withdrawn.

In view of the above, each of the presently pending claims in this application is believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to withdraw the outstanding rejection of the claims and to pass this application to issue. If it is determined that a telephone conference would expedite the prosecution of this application, the Examiner is invited to telephone the undersigned at the number given below.

In the event the U.S. Patent and Trademark office determines that an extension and/or other relief is required, applicant petitions for any required relief including extensions of time and authorizes the Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this document to **Deposit Account No. 03-1952** referencing docket No. 251502008600. However, the Commissioner is not authorized to charge the cost of the issue fee to the Deposit Account.

Dated: July 11, 2006

Respectfully submitted,

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# Soy Flour

## What Is It?

Soy flour, derived from ground soybeans, boosts protein, brings tenderness and moisture to baked goods, and provides the basis for some soymilks and textured vegetable protein. This versatile ingredient improves taste and textures of many common foods and often reduces the fat absorbed in fried foods, such as doughnuts or fritters. The taste of soy flour varies from a "beany" flavor to a sweet and mild flavor, depending on how it is processed.

## The Making of Soy Flour

Soy flour comes from de-hulled and cooked soybeans that are ground into a fine powder. To make low-fat soy flour, a mechanical expeller process removes most of the oil; and a chemical process removes all the oil from defatted soy flour.

## In The Market

Most stores carry at least one of the three types of soy flour:

**Full-fat** that contains all the natural oils found in the soybean,

**Low-fat** that contains about 1/3 the amount of fat as full-fat, and

**Defatted** that contains minimal fat as most of the oil is removed during processing.

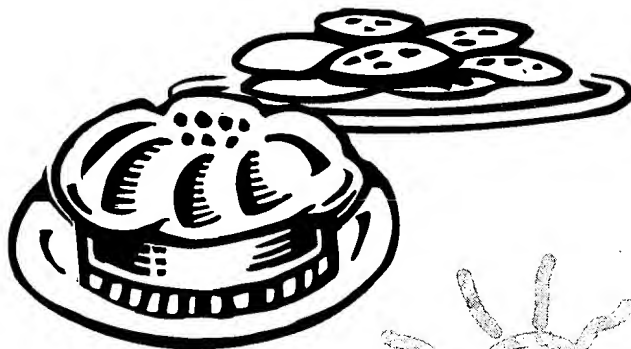
Soy flour comes in small bags in the baking or natural foods section of supermarkets. In natural foods markets, health food stores, food cooperatives, and food buying clubs, soy flour is often found in bulk bins. Many customers order soy flour through mail order houses and on-line shopping.

## In The Kitchen

Storing and Cooking Tips for Soy Flour:

- \* Kept in an airtight container, defatted and low-fat soy flour will stay fresh for up to one year. Full-fat soy flour will keep for up to one year in an airtight container in the freezer.
- \* Stir soy flour before measuring to avoid flour packing.
- \* Watch baked goods closely for over-browning. Baking products in a lower temperature oven (less 25° F) may prevent browning.

Full-fat and low-fat soy flours work best in sweet, rich, baked goods like cookies, soft yeast breads and quick breads. In these recipes, soy flour will substitute well for ten to thirty percent of the wheat or rye flour. Recipes specifically developed to use soy flour may replace more than thirty percent of other flours with soy. Replacing more than 40 percent of flour with soy is not recommended because soy-rich dough browns faster. Since soy flour is gluten-free, it cannot replace all the wheat or rye flour in yeast raised bread. Soyfood cookbooks, soy flour packages, and company web sites supply tasty recipes.



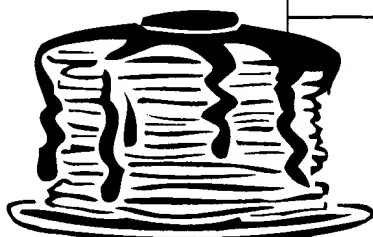
# Soyfoods!

Good Taste, Good Health

## Give Me Five

Quick ways to start using soy flour

1. Substitute soy flour for 1/3 of all-purpose flour in a pumpkin or applesauce bread recipe.
2. Use soy flour to thicken sauces and gravies.
3. Replace 1/3 of all-purpose flour with soy flour in your favorite pancake recipe.
4. Replace 1/4 of all-purpose flour with soy flour in favorite cookie recipe.
5. Replace 10-15 percent of bread flour with soy flour in a bread machine recipe. Use a high gluten, high protein wheat flour with the soy flour.



## Nutrition Facts

1/4-cup serving  
of soy flour  
provides

	Defatted soy flour	% Daily Value	Full-fat soy flour	% Daily Value	Low-fat soy flour	% Daily Value
Calories	80		93		82	
Total fat	0.3 g	0%	4.5 g	7%	1.5	2%
Saturated fat	0 g	0%	0.5 g	3%	0g	0%
Total carbohydrates	10 g	3%	6 g	2%	7g	2%
Protein	12 g		8 g		11g	
Cholesterol	0 mg	0%	0 mg	0%	0 mg	0%
Sodium	5 mg	0%	3 mg	0%	4 mg	0%
Dietary fiber	4 g	18%	4 g	15%	2 g	9%
Calcium	60 mg	6%	40 mg	4%	40 mg	4%
Potassium	595 mg		435 mg		565 mg	
Phosphorus	170 mg		100 mg		130 mg	
Folate	75 mcg		50 mcg		90 mcg	

Source: USDA Nutrient Standard Reference Release 12, (March 1998)

Average total  
isoflavones

42 mg

33 mg

50 mg

Source: USDA-Iowa State University Database on product information  
Isoflavone Content of Foods, 1999,  
USDA Nutrient Data Laboratory, Agricultural Research Service

Source: product  
information

Exchanges:

2 tbs. =

1 lean meat/  
meat substitute

2 tbs. =

1/2 lean meat/  
meat substitute

2 tbs. =

1 lean meat/  
meat substitute

Source: Based on information from Exchange List for Meal Planning, revised 1995 - The American Diabetes Association/The American Dietetic Association.

## Nutrition Highlights

Soy flour is a great source of high quality soy protein, dietary fiber and important phytochemicals, such as isoflavones. It provides a good source of iron, B vitamins and calcium.

Comparison of protein in flours:

Full-fat soy flour	approximately 40 %
Low-fat soy flour	approximately 52 %
Defatted soy flour	approximately 55 %
Whole wheat flour	approximately 16 %
Enriched white flour	approximately 12 %

## Soy Cookbooks

**The Complete Soy Cookbook**  
Paulette Mitchell  
IDG Books Worldwide, 1998

**The Natural Kitchen: Soy!**  
Dana Jacobi  
Prima Publications, 1996

**New Soy Cookbook**  
Lorna J. Sass  
Chronicle Books, 1998

**The Simple Soybean and  
Your Health**  
Mark Messina and Virginia Messina  
Avery Publishing Group, 1994

**Soy Expressions:  
Common-Sense Ways  
to Small Food Bills**  
Margaret B. Salmon  
Techkits, Inc., 1999

**Soyfoods Cookery: Your Road  
to Better Health**  
Louise Hagler  
The Book Publishing Co., 1996

**Soy of Cooking**  
Marie Oser  
John Wiley and Sons, 1996

**The Whole Soy Cookbook**  
Patricia Greenberg  
Three Rivers Press, 1998